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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ivo V. Ivanov

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MILES & STOCKBRIDGE PC  
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MCLEAN, VA 22102-3833

EXAMINER

TROTTER, SCOTT S

ART UNIT

PAPER NUMBER

3694

NOTIFICATION DATE

DELIVERY MODE

09/02/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketing@milesstockbridge.com  
sstiles@milesstockbridge.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/777,093	<b>Applicant(s)</b> IVANOV ET AL.	
	<b>Examiner</b> SCOTT S. TROTTER	<b>Art Unit</b> 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 18-21, and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

1. This action is in response to the amendment filed on May 27, 2010. Claims 1-15 and 18-21, and 23-25 are pending and examined. This rejection is **Final**.

### ***Response to Arguments***

2. Applicant's arguments filed May 27, 2010 have been fully considered but they were not persuasive.

3. While Bove and the rest do not use the term "drift" it does rebalance a portfolio which includes calculating how much to buy and sell of each asset to put the portfolio back in balance. (*see at least Bove Abstract.*) As far as displaying the amount of "drift" Bove figures make that obvious. (*see at least Bove Figures 2A, 2B, 3C, 3E, 5, 6, 7, 8B, and 8D.* 2A and 2B show breakdown of a portfolio displaying its percentages. 3C and 3E show portfolios by dollars. Figures 5 and 6 show target rebalances. Figure 7 shows a portfolio allocation by percentage.)

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-7, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bove et al. (U.S. Patent 7,149,713 B2 hereafter Bove) in view of Fernholz (U.S. Patent 5,819,238 hereafter Fernholz).

As per claim 1 Bove teaches:

A portfolio investment management system comprising:

an asset allocation strategy recommendation module adapted to receive investment goal information and investor risk tolerance level information from a user, said investment goal information including at least one of an initial investment amount or estimated contributions, and an estimated withdrawal target date, the asset allocation strategy recommendation module determining a percentage allocation for a plurality of asset classes, (*See at least Bove column 1 lines 56-column 2 line 2 and column 1 lines 12-17*)

an asset allocation strategy execution module adapted to execute the determined asset allocation strategy, (*See at least Bove column 1 lines 62-column 2 line 14*) and a rebalancing execution module adapted to automatically rebalance the portfolio upon a predetermined condition without any further input from the user, and configured to calculate in dollars and percentages a drift amount for each said asset class (*see at least Bove column 1 lines 17-21*) and to output a graphical directional indicator of said drift amount for each said asset class. (*See at least Bove Figures 2A, 2B, 3C, 3E, 5, 6, 7, 8B, and 8D. 2A and 2B show breakdown of a portfolio displaying its percentages. 3C and 3E show portfolios by dollars. Figures 5 and 6 show target rebalances. Figure 7 shows a portfolio allocation by percentage.*)

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While Bove does not explicitly teach "drift" it does teach balancing the portfolio by issuing trades to move it into balance which implicitly implies knowledge of the amount of drift for every asset being rebalanced since it has to know how much more or less of any asset is needed to bring a portfolio back into balance. Fernholz comes closer to talking about it because the predetermined condition it uses to trigger a rebalancing is how far out of balance is the portfolio. (*See at least Fernholz abstract*) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor drift since Fernholz monitored it to decide when to rebalance a portfolio when it gets outside of a predetermined band. While Bove does not explicitly teach displaying a drift amount by percentage it did teach displaying what was functionally a drift amount in dollars and teach displaying percentages so it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the ability to display percentages to display the percent of drift.

As per claim 2 Bove teaches:

The system of claim 1, wherein the predetermined condition is a predetermined date. (*See at least Bove column 1 lines 17-21. Periodically inherently includes once a month or once a year both of which would involve predetermined dates.*)

As per claim 3 Bove teaches:

The system of claim 2, wherein the predetermined date is an anniversary date of the portfolio's creation date. (*See at least Bove column 1 lines 17-21. Periodically inherently includes once a month or once a year both of which would involve predetermined dates.*)

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As per claim 4 Bove teaches:

The system of claim 1, wherein the predetermined condition is an additional investment into the portfolio. (*See at least Bove column 1 lines 17-21. Since a new investment would change the portfolio's allocation from the optimal allocation it would inherently be one of the periodic times to consider rebalancing.*)

As per claim 5 Bove teaches:

The system of claim 4, wherein the additional investment is greater than or equal to a predetermined threshold. (*See at least Bove column 1 lines 17-21 and column 1 lines 29-37. Excessive transaction costs inherently preclude making investments with small amounts of money relative to the transaction costs it would be better to not reach the desired allocation until the benefits of rebalancing out weigh the transaction costs.*)

As per claim 6 Bove teaches:

The system of claim 4, wherein the additional funds are invested pro rata in accordance with the portfolio's asset allocation as of the date of the additional investment. (If an investment is to be made at the same time a portfolio is rebalanced it will naturally be invested pro rata in accordance with the portfolio's asset allocation as of that date.)

As per claim 7 Bove teaches:

The system of claim 1, wherein the asset allocation strategy execution module executes trade orders in a tax aware manner. (*See at least Bove column 2 lines 15-19*)

As per claim 20 Bove teaches:

The system of claim 1, wherein the predetermined condition is based on the date of the last additional investment into the portfolio that caused an automatic rebalancing of the portfolio. (*See at least Bove column 1 lines 17-21.* Periodic would certainly include once a year which if an additional investment made happen on a date it would be one year after the investment.)

As per claim 21 Bove teaches:

The system of claim 1, wherein the rebalancing execution module is further configured to phase the portfolio into balance over time by applying received funds to the purchase of assets in order of largest recommended allocation percentage first.

Bove teaches dollar cost averaging in large purchases over time to avoid big spikes in the price of an asset. (*see at least Bove column 24, lines 47-59*) While it doesn't explicitly teach investing the cash to bring the portfolio back into balance Fernholz has a cash investment mode which would try to rebalance the portfolio. (*see at least Fernholz abstract.*) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the new investment dollars be used to try to rebalance the portfolio.

6. Claims 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bove et al. (U.S. Patent 7,149,713 B2 hereafter Bove) in view of Fernholz (U.S. Patent 5,819,238 hereafter Fernholz), Maggioncalda et al. (U.S. PG-Pub 2002/0138,386) and Dictionary of Business Terms 3<sup>rd</sup> edition by Jack Friedman et al. (hereafter Friedman).

As per claim 18 Bove teaches:

The system of claim 1,  
wherein the rebalancing execution module is further configured to send one or more email reminders to the user reminding the user that it is time to rebalance the portfolio, and

wherein the predetermined condition causing the automatic rebalancing is a failure to receive a response from the user after said one or more email reminders are sent.

While Bove is not explicit about sending email reminders Maggioncalda teaches that when an alert such as a suggestion that they rebalance their portfolio is generated if is not displayed during a user session an email notifying them of the alert can be sent. (*see at least Maggioncalda paragraph 228*) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made that email notification that it is time to rebalance their portfolio can be sent if they have not been logged in to receive such an alert. Friedman teaches that a security purchase order can be a Good-till-cancelled order, where an order to purchase a security under certain terms will remain in effect until it is executed or cancelled. Therefore it would have been obvious to have on order to rebalance a portfolio until informed otherwise not responding to emails is not informing otherwise.

As per claim 25 it is rejected under the same rationale as claim 18 since it is claim 18 rewritten in independent form.



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7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bove et al. (U.S. Patent 7,149,713 B2 hereafter Bove) in view of Powers et al. (U.S. Patent 6,684,190 B1 hereafter Powers) and Maggioncalda.

As per claim 19 Bove teaches:

The method of claim 8,  
sending one or more email reminders to the user reminding the user that it is time to rebalance the portfolio,

wherein the predetermined condition is a failure to receive a response from the user after said one or more email reminders are sent.

While Bove is not explicit about sending email reminders Maggioncalda teaches that when an alert such as a suggestion that they rebalance their portfolio is generated if is not displayed during a user session an email notifying them of the alert can be sent. (*see at least Maggioncalda paragraph 228*) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made that email notification that it is time to rebalance their portfolio can be sent if they have not been logged in to receive such an alert.

8. Claims 8-12, 14, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bove et al. (U.S. Patent 7,149,713 B2 hereafter Bove) in view of Powers et al. (U.S. Patent 6,684,190 B1 hereafter Powers).

As per claim 8 Bove teaches:

A method for portfolio management using an electronic investment management system, comprising:

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- a. receiving initial investment information from a user, including initial investment amount and financial goal information, into the electronic investment management system; (*See at least Bove column 1 lines 56-62*)
- b. receiving risk tolerance level information from the user into the electronic investment management system; (*See at least Bove column 1 lines 58-60 and column 1 lines 12-17*)
- c. determining a recommended asset allocation strategy for the investment portfolio based on the received investment information and risk tolerance level information; (*See at least Bove column 1 lines 15-17 and column 1 lines 62-column 2 line 2.*)
- d. determining an investment amount of funds required to reach a desired financial goal included in said received risk tolerance information;
- e. implementing the recommended asset allocation strategy by the investment management system; (*See at least Bove column 1 lines 62-column 2 line 14*) and
- f. automatically rebalancing the portfolio upon a predetermined condition (*See at least Bove column 1 lines 17-21.*) including calculating in dollars and percentages a drift amount for each said asset class. (*See at least Bove Figures 2A, 2B, 3C, 3E, 5, 6, 7, 8B, and 8D. 2A and 2B show breakdown of a portfolio displaying its percentages. 3C and 3E show portfolios by dollars. Figures 5 and 6 show target rebalances. Figure 7 shows a portfolio allocation by percentage.*)

While Bove does not explicitly teach determining an amount needed to be invested to achieve a desired financial goal Powers does teach determining the amount needed at a given level of risk to achieve a financial goal. (*see at least Powers column*

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8 lines 52-column 9 line 36) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have followed the teaching of Powers to determine the amount that would need to be contributed to achieve a financial goal at a given risk level. While Bove does not explicitly teach "drift" it does teach balancing the portfolio by issuing trades to move it into balance which implicitly implies knowledge of the amount of drift for every asset being rebalanced since it has to know how much more or less of any asset is needed to bring a portfolio back into balance. Fernholz comes closer to talking about it because the predetermined condition it uses to trigger a rebalancing is how far out of balance is the portfolio. (*See at least Fernholz abstract*) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to monitor drift since Fernholz monitored it to decide when to rebalance a portfolio when it gets outside of a predetermined band. While Bove does not explicitly teach displaying a drift amount by percentage it did teach displaying what was functionally a drift amount in dollars and teach displaying percentages so it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the ability to display percentages to display the percent of drift.

As per claim 9 Bove teaches:

The method of claim 8, wherein the predetermined condition is a predetermined date. (*See at least Bove column 1 lines 17-21. Periodically inherently includes once a month or once a year both of which would involve predetermined dates.*)

As per claim 10 Bove teaches:

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The method of claim 9, wherein the predetermined date is an anniversary date of the portfolio's creation date. (*See at least Bove column 1 lines 17-21. Periodically inherently includes once a month or once a year both of which would involve predetermined dates the anniversary date of the portfolios creation would be rebalancing a portfolio once year.*)

As per claim 11 Bove teaches:

The method of claim 8, additionally comprising:

f. receiving additional investment information from the user. (*See at least Bove column 1 lines 17-21. In order to modify allocation choices based on the investors needs changing it is inherent that those changed needs are communicated to the system.*)

As per claim 12 Bove teaches:

The method of claim 11, additionally comprising:

g. automatically rebalancing the portfolio upon receiving the additional investment information. (*See at least Bove column 1 lines 17-21.*)

As per claim 14 Bove teaches:

The method of claim 11, wherein the additional funds are invested pro rata in accordance with the portfolio's asset allocation as of the date of the additional investment. (If an investment is to be made at the same time a portfolio is rebalanced it will naturally be invested pro rata in accordance with the portfolio's asset allocation as of that date.)

As per claim 15 Bove teaches:

The method of claim 8, wherein executing the rebalancing step (e) makes trade orders in a tax aware manner. (*See at least Bove column 2 lines 15-19*)

As per claim 23 Bove teaches:

The method of claim 8, wherein the predetermined condition is based on the date of the last additional investment into the portfolio that caused an automatic rebalancing of the portfolio. (*See at least Bove column 1 lines 17-21*. Periodic would certainly include once a year which if an additional investment made happen on a date it would be one year after the investment.)

9. Claims 13, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bove et al. (U.S. Patent 7,149,713 B2 hereafter Bove) in view of Powers et al. (U.S. Patent 6,684,190 B1 hereafter Powers) and Fernholz.

As per claim 13 Bove teaches:

The method of claim 11, wherein the predetermined condition is the additional investment being greater than or equal to a predetermined threshold. (*See at least Bove column 1 lines 17-21 and column 1 lines 29-37*. Excessive transaction costs inherently preclude making investments with small amounts of money relative to the transaction costs it would be better to not reach the desired allocation until the benefits of rebalancing out weigh the transaction costs.)

While Bove has some suggestive parts it is not explicit about having a predetermined threshold but Fernholz calls for rebalancing when a portfolio is outside of a predetermined band which is a predetermined threshold. (*see at least Fernholz abstract*) Therefore it would have been obvious to a person of ordinary skill in the art at

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the time the invention was made to consider how far out of balance the portfolio is and the transaction costs involved in moving it back into balance.

As per claim 24 Bove teaches:

The system of claim 1, wherein the rebalancing execution module is further configured to phase the portfolio into balance over time by applying received funds to the purchase of assets in order of largest recommended allocation percentage first.

Bove teaches dollar cost averaging in large purchases over time to avoid big spikes in the price of an asset. (*see at least Bove column 24, lines 47-59*) While it doesn't explicitly teach investing the cash to bring the portfolio back into balance Fernholz has a cash investment mode which would try to rebalance the portfolio. (*see at least Fernholz abstract.*) Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the new investment dollars be used to try to rebalance the portfolio.

### **Conclusion**

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication from the examiner should be directed to Scott S. Trotter, whose telephone number is 571-272-7366. The examiner can normally be reached on 8:30 AM – 5:00 PM, M-F.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell, can be reached on 571-272-6712.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14. The fax phone number for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 (Official Communications; including After Final  
Communications labeled "BOX AF")

(571) 273-6705 (Draft Communications)

sst  
8/31/2010

/KIRSTEN S APPLE/

Primary Examiner, Art Unit 3694